

Brief Summary of Project

Name of Project:	Patratu Super Thermal Power Project, Phase-I (3 x 800 MW)															
Name of Project Proponent:	PATRATU VIDYUT UTPADAN NIGAM LIMITED (PVUNL), Ranchi, Jharkhand (a Joint Venture Company of NTPC Limited & Jharkhand Bijli Vitaran Nigam Limited)															
Location of the Project:	<p>The proposed site is located near Patratu town in Ramgarh district of Jharkhand.</p> <p>The latitudes and longitudes of the site are as follows:</p> <p>Main Plant & Township:</p> <table border="1"> <thead> <tr> <th>Corner name</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>Top Corner</td> <td>23° 39' 00'' N</td> <td>85° 17' 51.5" E</td> </tr> <tr> <td>Bottom Corner</td> <td>23° 38' 12.5'' N</td> <td>85° 17' 27" E</td> </tr> <tr> <td>Left Corner</td> <td>23° 38' 22.5'' N</td> <td>85° 17' 10.6'' E</td> </tr> <tr> <td>Right Corner</td> <td>23° 38' 40'' N</td> <td>85° 17' 57'' E</td> </tr> </tbody> </table> <p>The vicinity map of the project is shown in Exhibit-I.</p>	Corner name	Latitude	Longitude	Top Corner	23° 39' 00'' N	85° 17' 51.5" E	Bottom Corner	23° 38' 12.5'' N	85° 17' 27" E	Left Corner	23° 38' 22.5'' N	85° 17' 10.6'' E	Right Corner	23° 38' 40'' N	85° 17' 57'' E
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Capacity & Unit Configurations:	Current Proposal :Phase-I, 2400 MW (3x800 MW) Ultimate Capacity : Phase-I & Phase-II, 4000 MW (3x800 MW+ 2x800 MW)															
Land Requirement, Current Land Use and Availability:	The total land to be transferred to PVUNL is 1859 acres. Out of 1859 acres, about 1234 acres of land has been envisaged for Plant, Ash pond and Land on railway track of the for Phase-I (3X 800 MW).															
Water Requirement and Availability:	As per JV Agreement, Govt. of Jharkhand shall provide water to the proposed project from Patratu Dam/Reservoir. The requirement of Water for PSTPP Phase-I, shall be 27 Cusecs with Air cooled condensers / 72 Cusecs with Water cooled condensers. The type of cooling system shall be decided during detailed feasibility study.															
Fuel Requirement:	Coal requirement for the project is about 12 MTPA. It is proposed to supply coal to the proposed project from Banhardih captive coal block at a distance of about 60 km from plant allocated to JUUNL for end use of Patratu expansion.															
Environmental Setting of the Project	The proposed site almost conforms to the siting criteria for thermal power plants. No wildlife sanctuaries/ national parks or any ecological sensitive area of national importance exist within 10 km. radius of proposed site. However, some Protected forests are located within 10 km radius from site (an indicative list of forests are given in Form-1 of TOR application). No archaeological monument of national importance & defense installations exist within 10 km. radius of the proposed site.															

	<p>National Highway no. 33 & 23 are located at approx. 21 km from plant boundary. The nearest Railway Station is Patratu which is at a distance of about 4 km on Barkakhana-Barwadih Railway line.</p> <p>Site is located about 6.5 km, aerial distance from Damodar river. However, Nalkari river flows at approx. 300 m from plant boundary.</p> <p>No archaeological, historical, cultural, and defence installations within 10 km radius from plant.</p>
Ash Disposal	<p>Fly ash generated at proposed thermal power station shall be utilized in the areas of cement, concrete & building products manufacturing, road embankment construction and mine filling etc. Ash disposal of proposed expansion Project (3x800 MW) will be done in the nearby ash ponds located on land available with the project area.</p>
Cost of the Project:	<p>The Cost/MW is estimated at about Rs. 6 Crore/MW (based on site specific BOQ). The estimate shall be revised in due course.</p>